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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Tabular output not generated. Run on: Sat May 13 09:35:48 2000; MasPar time 3.96 Seconds 257.054 Million cell updates/sec

Title:
Description:
Perfect Score:
Sequence:

>US-09-331-631-1 (74-116) from US09331631.pep (3 of 5) 344 1 NQEDPQTECQQCQRRCRQQQESGPRQQQYCQRRCKEICEEEEEY 43

Searched: Scoring table: PAM 150 Gap 11 188963 seqs, 23686106 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

a-geneseq35 1:geneseqp

Database:

Statistics: Mean 22.277; Variance 95.380; scale 0.234

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	თ	5	4	ω	2	н-	Result
76	76	77	77	77	80	80	80	80	82	83	83	85	96	105	111	113	129	162	162	337	342	344	Score
22.1	22.1	22.4	22.4	22.4	23.3	23.3	23.3	23.3	•	24.1	24.1	24.7	27.9	30.5	32.3	32.8		47.1	47.1	98.0	99.4	100.0	Query Match
440	439	918	614	614	919	919	441	441	626	. 107	106	637	35	33	593	28	590	566	525	625	666	666	Length
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W99597	R33745	R12223	W22149	W62834	P93109	W14783	R89214	R41875	W22150	R91705	R91706	W62837	R21079	W62836	W62835	W62841	W62832	R20181	W62831	W62830	W62829	W62828	ID
Mouse peroxisome proli	XR4.	Human androgen recepto	Peanut allergen Ara hI	Arachis hypogaea antim	Human androgen recepto	Androgen receptor.	Peroxisome proliferato	Steroid hormone recept	Peanut allergen Ara hI	AcaNAP23.	AcaNAP24.	Hordeum vulgare antimi	Antimicrobial maize pe	Zea mays antimicrobial	Zea mays antimicrobial	Stenocarpus sinuatus a	n hirsut	Sequence encoded by 67	Theobroma cacao antimi	Macadamia integrifolia	Macadamia integrifolia	Macadamia integrifolia	Description
2.58e+01	2.58e+01	2.15e+01	2.15e+01	2.15e+01	1.24e+01	1.24e+01	1.24e+01	1.24e+01	8.58e+00	7.13e+00	7.13e+00	4.91e+00	6.11e-01	1.07e-01	3.29e-02	2.22e-02	9.03e-04	1.03e-06	1.03e-06	3.73e-23	1.23e-20	7.91e-24	Pred. No.

45 68	44 68						38 69						32 72								
19.8	19.8	19.8	19.8	19.8	19.8	20.1	20.1	20.1	20.3	20.6	20.6	20.6		•	21.5	•	22.1	22.1	22.1	22.1	22.1
1786	1003	220	190	145	55	898	402	204	516	529	509	405	468	768	805	1308	1308	1058	1058	910	440
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W50893	W41301	W18652	R91710	W86213	W80489	W31853	W57410	W59609	P61362	R38209	R38210	W33737	R74053	R27683	R80561	R54841	R91733	R91734	R54843	R91737	R92479
Human laminin B1 chain	AmEPV entomopoxvirus s	Human apolipoprotein E	AceNAP4.	Human VEGF-B truncated	Murine vascular endoth	Mycobacterium tubercul	Human EP3-V receptor.	DNA-binding/dimerisati	Soybean glycinin A3B4	LD1D2D3.ApaL EGF recep	LD2D3D4 EGF receptor t	Epidermal growth facto	Human peroxisome proli	Rabbit beta-8 intergin	Murine Ah receptor pro	HER4.	Receptor tyrosine kina	Receptor tyrosine kina	HER4 with alternate 3'	HER4-Ig fusion protein	Peroxisome proliferato
1.08e+02	1.08e+02	1.08e+02	1.08e+02	1.08e+02	1.08e+02	9.06e+01	9.06e+01	9.06e+01	7.59e+01	6.35e+01	6.35e+01	6.35e+01	5.31e+01	4.44e+01	3.71e+01	2.58e+01	2.58e+01	2.58e+01	2.58e+01	2.58e+01	2.58e+01

ALIGNMENTS

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M62829 standard; Protein; 666 AA. W62829; 27-OCT-1998 (first entry) Macadamia integrifolia antimicrobial protein. antimicrobial protein; infestation; control. Macadamia integrifolia.	Query Match Query Match Best Local Similarity 100.0%; Pred No. 7.91e-24; Matches 43; Conservative 0; Mismatches 0; Indels 0; Gaps 74 NOEDPOTECOOCORRCROOESGPROQOYCORRCKEICEEEEEY 116	in from e.g. Macadamia integri robial infestations of plants English. antimicrobial protein which c al infestations in plants and	7805-A1. 7805-A1. L-1998. L-1998. C-1996; AU-004275. C-1996; AU-004275. C-1 COOP RES CENT TROPICAL PLANT PATHOLOGY. MI, Goulter KC, Green JL, Manners JN, Marcu 98-37779/32 . B; V42310.	1 62828; 62828; 7-OCT-1998 (first entry) acadamia integrifolia antimicr ntimicrobial protein; infestat acadamia integrifolia. Cocation/Qualif ey 1. Cocation/Qualif eptide /note= "signal rotein 29.666 rotein 29.666

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22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
Bower NI, Goulter KC, Green JL, Manners JM, Mar
                                                              02-JUL-1998
                                                                                                   Theobroma cacao W09827805-A1.
                                                                                                                                                              antimicrobial protein;
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Theobroma ca
                                                                                                                                                                                                                                                                            W62831 standard;
W62831;
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The sequence is that of an antimicrobial protein which can
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The sequence is that of an antimicrobial protein which can
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Macadamia integrifolia antimicrobial protein.
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Best Local S
Matches 2
                                                                                                              02-JUL-1998.,
22-DEC-1997; F
20-DEC-1996; F
                                                                                                                                                                                                                         Gossypium hirsutum antimicrobial protein.
antimicrobial protein; infestation; contr
Gossypium hirsutum.
wo9827805-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression vectors (Claim 4; Fig 2; 59pp; English.

The inventors claim a 67 kD and 31 kD T. cacao protein, and fragments, and encoding DNAs. The 47 kD and 31 kD proteins are derived from the 67 kD precursor. T. cacao protein cDNA was detected in a cDNA library prepared from immature cocoa beans RNA using a probe based on the AA sequence of a CNBT peptide common to the 47 kD and 31 kD polypeptides. Homology searches revealed close homologies between the 67 kD polypeptide and the vicilins, which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel anti-microbial protein from e.g. Macadamia integrifolia useful for controlling microbial infestations of plants or mammals Claim 1; Page 47-49; 96pp; English.

The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.
                                                                                                                                                                                                                                                                                                                                                                                                             W62832 standard;
W62832;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seed
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(MRSC ) MARS UK LTD.
Spencer ME, Hodge R, Deakin
WPI; 92-024418/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-APR-1992 (first entry)
Sequence encoded by 67 kD T. cacao
Cocoa; flavour; vicilin; seed stora
                                                          Bower NI,
                                                                                                                                                                                                                                                                                                                                                                        27-OCT-1998 (first entry)
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16-APR-1992
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                                                                                        (RETR-) COOP
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20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-DEC-1991.
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20; Conservative
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                                        97; AU0874.
96; AU-004275.
OOP RES CENT TROPICAL PLANT PATHOLOGY
Goulter KC, Green JL, Manners JM, Mai
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larity 50.0%;
Conservative
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Pred. No. 1.03e-06;
9; Mismatches 11
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Pred. No. 1.03e-06;
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The sequence is that of an antimicrobial protein which be used to control microbial infestations in plants and
                                                                                                                                                                                                                                                                                                                          02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
Bower NI, Goulter KC, Green JL, Manners JM, Mar
WPI; 98-377279/32.
                                                                                                                                                                                             Novel anti-microbial protein from useful for controlling microbial Claim 1; Page 58-60; 96pp; English The sequence is that of an antimonal controlling that of an antimonal controlling the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling that the sequence is that of an antimonal controlling the sequence is that of an antimonal controlling the sequence is the sequ
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W62835 standard;
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Novel anti-microbial protein from e.g. Macadamia integrifol useful for controlling microbial infestations of plants or Claim 1; Page 49-51; 96pp; English.

The sequence is that of an antimicrobial protein which can
                                                                                              Sequence
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(RETR-) COOP RES CENT T
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antimicrobial protein; infestation; control
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20; Conservative
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32.3%;
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antimicrobial protein which can
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Pred. No. 9.
7; Mismatc
   Score
Pred.
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Pred. No. 2.22e-02;
2; Mismatches 8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          102
                                                                                                                                                                                                                                                                                                                                                                Manners JM, Marcus JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            n e.g. Macadamia integrifolia -
infestations of plants or mammals
                                                                                                                                                                                                                                                          n e.g. Macadamia
infestations of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
   111;
No.
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   L; DB 1;
. 3.29e-02;
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0.03e-04;
ches 11;
                                                                                                                                                           in plants
                              Length
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                                                                                                                                                                                                                                                          integrifolia -
plants or mammals
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plants or man
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d mammalian
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RESULT RESULT OF THE SOL TO THE S
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                                                                                          Matches
                                                                                                               Query Match .
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WC9827805-A1,
02-JUL-1998; AU0874.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
(RETR.) COOP RES CENT TROPICA
BOWER NI, GOULTEET KC, Green J
WPI; 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2ea mays.
EP-465009-A.
08-JAN-1992.
05-JUN-1991; 305064.
05-JUN-1990; US-536127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R21079 stand
R21079;
09-APR-1992
                                                                                                                                                                                                                                          or inhibiting plant pathogenic microorganisms.

Example 2; Page 5; 2lpp; English.

The peptide (SEQ ID NO 1) was purified from public corn variety B73 and propriety corn variety MH18. It is basic and has has a total mol. wt. of 3900 daltons. The peptide sequence was used to design probes which were used to screen a maize genomic or cDNA library. The isolated CMIII gene can be used to prepare an expression vector for prodn. of recombinant CMIII for use in controlling plant patho-
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 92-010214/02. Use of maize seed peptide CMIII and DNA encoding
                                                                                                                                                                                                     See also Q20272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PION-) PIONEER HI-BRED
Duvick JP, Rood TA, Rao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel anti-microbial protein from e.g. Macadamia useful for controlling microbial infestations of Disclosure, Page 60, 96pp; English.

The sequence is that of an antimicrobial protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W62836; (first entry)
                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antimicrobial Maize; CMIII;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      animals
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W62836
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             557
    84
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                                         6 ECRROCLRRHEGOPYETOECMRRCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6 ECRROCLRRHEGOPWETQECMRRCR 30
  CORRC-ROOESGPROOVCORRCK
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:|::::|::|:|:|:|:|:||:||
QEDPQTECQQCQRRC-RQQESGPRQQQXCQRRCK 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
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                                                                                        11;
                                                                                                             Similarity
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                                                                                                                                                                                  S
S
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                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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corn;
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                                                                                                                                                                                                       and 3.
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                                                                                                             27.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide,
pathogen.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \frac{3}{3}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antimicrobial protein which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 105; DB 1;
Pred. No. 1.07e-01;
9; Mismatches 4
                                                                                     Score 96; DB 1;
Pred. No. 6.11e-01
8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
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      107
                                            30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manners JM, Marcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       plants and
                                                                                                                                    Length
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                                                                                          Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                             killing
                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>ب</u>
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                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>ب</u>
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RESULTANT ACCORDED BY THE STATE OF THE STATE
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Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-APR-1996: U13231.
17-OCT-1995; US-326110
18-OCT-1994; US-326110
05-JUN-1995; US-486399.
05-JUN-1995; US-461965.
05-JUN-1995; US-486397.
05-JUN-1995; US-465380.
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02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-0042
                                                                                                                                                activity, isolated from nematodes, are useful to inhibit blood coagulation. The proteins can be added to blood collection tubes defining the collection of mammalian plasma. They are also useful to prevent or inhibit thrombosis, and may be given alone or in combination with other therapeutic or in vivo diagnostic agents. The proteins can serve as immunogens to raise antibodies for use in the diagnosis and identification of NAP concn. levels in biological fluids, e.g. to detect mammalian infection with a parasitic worm.
They can also be used as immunogens in prophylactic and therapeutic vaccines against parasitic worm infection. The proteins may double the clotting time of human plasma in prothrombin time assays when present at 10-50 nMol, and double the clotting time of human plasma in activated partial thrombin time assays when present
                                                                                                                                                                                                                                                                                                                                                                     Proteins with anticoagulant and/or serine protease inhibitory activity, isolated from nematodes, are useful to inhibit bloom
                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 221; Fig 13B; 243pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    coagulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Proteins with anticoagulant and/or serine protease inhibitory activity - isolated from nematodes and useful to inhibit blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vlasuk GP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bergum PW, Gansemans YGJ,
Lauwereys MJ, Messensjhl,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nematode-extracted anticoagulant protein; serine protease;
nematode; thrombosis; parasitic worm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel anti-microbial protein from e.g. Macadamia integrifol useful for controlling microbial infestations of plants or Claim 1; Page 60-62; 96pp; English.

The sequence is that of an antimicrobial protein which can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY Bower NI, Goulter KC, Green JL, Manners JM, MaWPI; 98-377279/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antimicrobial protein; infestation; control.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; T12952.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 96-222007/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ancylostoma caninum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AcaNAP; HpoNAP; NamNAP; AceNAP; AduNAP; anticoagulant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R91706
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     be used to control microbial infestations in plants and mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hordeum vulgare.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        / Match 24.7%;
Local Similarity 42.4%;
nes 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42 QQCVQRCRQ-ER-PR---YSHARCVQECRDDQQ 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QQCQRRCRQQESGPRQQQYCQRRCKEICEEEEE 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; Protein; 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORVAS INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                637 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AU-004275.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 85;
Pred. No.
7; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jespers LS, Laroche YR;
Moyle M, Stanssens PEH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manners JM, Marcus JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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. 4.91e+00;
. hos 7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 637
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plants or ma
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                                                                                                                                                                                         coagulation
Claim 221; Fig 13A; 243pp; English.
Claim 221; Fig 13A; 243pp; English.
Croagulation with anticoagulant and/or serine protease inhibitory activity, isolated from nematodes, are useful to inhibit blood coagulation. The proteins can be added to blood collection tubes defining the collection of mammalian plasma. They are also useful to prevent or inhibit thrombosis, and may be given alone or in combination with other therapeutic or in vivo diagnostic agents.
Croagulation can serve as immunogens to raise antibodies for use in the diagnosts and identification of NAP concn. levels in biological fluids, e.g. to detect mammalian infection with a parasitic worm.
Croagulation be used as immunogens in prophylactic and therapeutic vaccines against parasitic worm infection. The proteins may double the clotting time of human plasma in prothrombin time assays when present at 10-50 nMol, and double the clotting time of human plasma in activated partial thrombin time assays when present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-1995; U13231.
18-OCT-1994; US-326110.
05-JUN-1995; US-446399.
05-JUN-1995; US-4461965.
05-JUN-1995; US-486397.
05-JUN-1995; US-465380.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bergum PW, Ga
Lauwereys MJ,
Vlasuk GP;
              The anticoagulant proteins are pref. derived from Ancylostoma caninum, A. ceylanicum, A. duodenale, Necator americanus or Heliogomosmoides polygyrus. The proteins pref. have 2 NAP domains and specifically inhibit the catalytic activity of the factor VIIA/TF complex in the presence of factor xa or actalytically inactive factor xa deriv., do not specifically inhibit the activation of factor VIIA in the absence of TF and do not specifically inhibit prothrombinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   americanus or Heligomosmoides polygyrus.

The proteins pref. have 2 NAP domains and specifically inhibit the catalytic activity of the factor VIIa/TF complex in the presence of factor Xa or a catalytically inactive factor Xa deriv., do not specifically inhibit the activation of factor VIIa in the absence of TF and do not specifically inhibit prothrombinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 96-222007/22.
N-PSDB; T11951.
Proteins with anticoagulant and/or serine protease inhibitory
activity - isolated from nematodes and useful to inhibit blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AcaNAP; HpoNAP; NamNAP; AceNAP; AduNAP; anticoagulant; nematode extracted anticoagulant protein; serine protenematode; thrombosis; parasitic worm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R91705 standard; Protein;
R91705;
17-NOV-1996 (first entry)
                                                                                                                                                                               at 10-100 nMol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ancylostoma caninum. W09612021-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AcaNAP23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        at 10-100 nMol.

The anticoagulant proteins are pref. derived from Ancylostoma caninum, A. ceylanicum, A. duodenale,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102 CQRRCK-EICEEEEEY 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      y Match 24.1%;
Local Similarity 56.3%;
hes 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39 CERKCKIETSEEEDDY 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; Protein; 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORVAS INT INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       106 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gansemans YGJ,
, Messensjhl,
AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jespers LS, Laroch
Moyle M, Stanssens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 83; DB 1; L
Pred. No. 7.13e+00;
4; Mismatches 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laroche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2;
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Query Match

24.18;

Score

83; DB

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Length 107

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RESULT ID R4 AC R4 AC R7 11 TO T 11 TO
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Best Local Similarity
Watches 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peanut allergens Ara hI and Ara hII - used for vaccination and in Theory two-site monoclonal antibody based ELISA

SClaim 31; Page 172; 354pp; English.

CIAIM 31; Page 172; 354pp; English.

CIT is sequence was deduced from cDNA clone P41b (T76613), isolated from peanut seed cDNA using a primer (see T76616) based on an isolated Ara hI peptide (see W24206). The sequence shows significant homology with the vicilin family of seed storage proteins of other legumes. The allergen is recognised by serum CIGE from a large proportion of individuals with peanut to hypersensitivity. Ara hI and Ara hII (see W24164) can be used to raise monoclonal antibodies which are used in a specific two-site MAD ELISA for the detection of Ara hI or Ara hII (claimed). 135-c binding Ara hI antigen epitopes (see W24165-87) may be used in constant of the protect against allergic reactions to peanut allergens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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23-SEP-1996; U15222.
04-MAR-1996; US-610424.
29-DEC-1995; US-009455.
(UVAR-) UNIV ARKANSAS.
Bannon GA, Burks AW, Cockrell G, WPI; 97-363453/33.
29-SEP-1993.
23-MAR-1993; 006043.
24-MAR-1992; US-857055.
(MERI ) MERCK & CO INC.
Rodan GA, Rutledge SJ,
                                                                                                                                                                                                                      LT 15
R41875;
R41875;
13-APR-1994 (first entry)
Steroid hormone receptor (NUCI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-DEC-1997 (first entry)
Peanut allergen Ara hI.
Peanut; seed storage protein; allergen; allergy; hypersensitivity;
vaccine; anaphylactic shock; immunotherapy; therapy;
monoclonal antibody; ELISA; analysis; Ara hI.
Arachis hypogaea strain Florunner.
Key
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       e.g. anaphylactic sequence 626 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vaccines to protect agai
                                                                                                                                          Homo sapiens. GB2265376-A.
                                                                                                                                                                                          Steroid; hormone; receptor; osteosarcoma; superfamily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; T76613
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     31 QKKTENPCAQRCLQSC-QQEPDDLKQKACESRCTKL 65
                                                                                                                                                                                                                                                                                                                                                                                                              75 QEDPQTEC-QQCQRRCRQQESGPRQQQYCQRRCKEI 109
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23.8%;
ilarity 33.3%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= Sig_peptide
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        Schmidt A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 82; D. Pred. No. 8.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 7.13e+00;
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        Vogel RL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; I
8.58e+00;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 626
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Search completed: Sat May 13 09:35:56 2000
                                                                                         Query Match
Best Local S
Matches
                                                                                                                                                        New human steroid hormone receptor NUCI - used to assay and evaluate ligands binding to the receptor Claim 5, Page 39-40; 62pp; English.
The steroid hormone receptor (designated NUCI) is used in a identify and evaluate chemical entities that bind to it.
                                                                                                                                                                                                                           WPI; 93-305586/39.
N-PDSB; Q48939.
                                                                                                                                               Sequence
                                                                  107
                                        81
                                                                                                        Local Similarity
                                                      EYEKCERSCKIQKKNRNKCQYCRFQKC 133
                                        ECQQCQRRCRQQESGPRQQQYCQ-RRC 106
                                                                                           9
                                                                                                                                               441 AA;
                                                                                           Conservative
                                                                                                      23.3%;
                                                                                       Score 80;
Pred. No.
6; Misma
                                                                                          Mismatches
                                                                                                      DB 1;
1.24e+01
                                                                                                                   Length 441
                                                                                           Indels
                                                                                                                                                           used in assays to to it.
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                                                                                           Gaps
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Job time : 8 secs

